IN THE CLAIMS:

Please amend the claims as shown below:

Claims 1-33 (Canceled).

34. (Previously presented) A method of treating a disease or pathological condition associated with dysregulation of the PI-3 kinase pathway, comprising administering to a subject suffering from said disease an effective amount of a composition that inhibits the activity of PRF1.

35. (Previously presented) The method according to claim 34, wherein said dysregulation of said PI-3 pathway is associated with increased or unwanted activity of PRF1.

36. (Previously presented) The method according to claim 34, wherein said disease or pathological condition is cancer or a precancerous growth.

37. (Previously presented) The method according to claim 36, wherein said disease or pathological condition is selected from the group consisting of endometrial cancer, colorectal carcinoma, glioma, endometrial cancer, adenocarcinoma, endometrial hyperplasia, Cowden's syndrome, hereditary non-polyposis colorectal carcinoma, Li-Fraumeni syndrome, breast cancer, thyroid cancer, ovarian cancer, and prostate cancer.

38. (Previously presented) The method according to claim 35, wherein said disease or pathological condition is selected from the group consisting of Bannayan-Zonana syndrome, Lhermitte-Duklos' syndrome, a hamartoma-macrocephaly diseases, a mucocutaneous lesion, macrocephaly, mental retardation, gastrointestinal harmatoma, lipoma, thyroid adenomas, fibrocystic disease of the breast, and cerebellar dysplastic gangliocytoma.

39. (Previously presented) The method according to claim 34, wherein said composition comprises at least one agent selected from the group consisting of a peptide, a protein, an antibody, an anticaline, a functional nucleic acid, and a small molecule drug.

40. (Previously presented) The method according to claim 39, wherein said agent is a functional nucleic acid selected from the group consisting of an aptamer, an aptazyme, a ribozyme, a spiegelmer, an antisense oligonucleotide and an siRNA.

41. (Previously presented) The method according to claim 40, wherein said agent is an antisense oligonucleotide.

42. (Previously presented) The method according to claim 41, wherein said antisense oligonucleotide comprises a sequence selected from the group consisting of SEQ ID NOS 4-13.

43. (Previously presented) The method according to claim 40, wherein said agent is an siRNA.

44. (Currently amended) The method according to claim 43 wherein said siRNA molecules comprises nucleotides 126-176 of SEQ ID NO:17 the sequence 5' gggagactagaggcaggagc aaaaaaaaaaa ctcctgcctctagtctccac 3'.

45. (Previously presented) The method according to claim 34, wherein said subject is a human.

46. (Previously presented) A method for identifying an agent suitable for treating a disease or pathological condition associated with dysregulation of the PI-3 kinase pathway, comprising

contacting a test system comprising a protein having PRF1 activity with a composition comprising a candidate compound, and determining if PRF1 activity is reduced in the presence of said candidate compound.

47. (Previously presented) The method according to claim 46, wherein said reduction in activity is measured by measuring a change in expression of said protein having PRF1 activity.

48. (Previously presented) The method according to claim 47, wherein said test system comprises a cell that expresses said protein having PRF1 activity.

49. (Previously presented) The method according to claim 46 wherein said candidate compound is selected from the group consisting of a peptide, a protein, an antibody, an anticaline, a functional nucleic acid, a small molecule drug, an aptamer, an aptazyme, a ribozyme, a spiegelmer, an antisense oligonucleotide and an siRNA.

50. (Previously presented) The method according to claim 46, wherein said composition comprises a plurality of candidate compounds.

51. (Previously presented) A method for diagnosing a disease associated with a dysregulated PI-3 kinase pathway in a subject suspected of suffering from said disease, comprising measuring PRF1 activity in a sample obtained from said subject and comparing said activity with a control level of activity, wherein an increase in PRF1 activity indicates the presence of disease.

52. (Previously presented) The method according to claim 51, wherein PRF1 activity is measured by determining expression of PRF1.

53. (Previously presented) The method according to claim 51, wherein said control level of activity is measured in a control tissue obtained from said subject and

wherein said control tissue is not suspected of having a dysregulated PI-3 kinase pathway.

54. (Previously presented) The method according to claim 51, wherein said control level of activity is taken from a database of control levels.

55. (Previously presented) A method for determining the efficacy of a therapeutic treatment regimen in a subject, comprising:

measuring PRF1 activity in a first sample obtained from the subject, thereby generating an initial level;

administering the treatment re gimen to the subject;

measuring PRF1 activity in a second sample from the patient at a time following administration of the treatment regimen, thereby generating a test level; and

comparing the initial and test levels, wherein a decrease in PRF1 activity in the test level relative to the initial level indicates that the treatment regimen is effective in the patient.

56. (Previously presented) A method for selecting test agents having a therapeutic effect in a subject, comprising:

measuring PRF1 activity in a first sample obtained from the subject, thereby generating a pre-treatment level;

administering a test agent to the subject;

measuring PRF1 activity in a second sample from the patient at a time following administration of the test agent, thereby generating data for a test level; and

comparing the pre-treatment level to the test level, wherein data showing no decrease in the test level relative to the pre-treatment level indicates that the test agent is not effective in the patient; and

eliminating the test agent from further evaluation or study.

57. (Previously presented) A pharmaceutical composition comprising at least one agent that inhibits the activity of PRF1 and a pharmaceutically acceptable carrier.

58. (Previously presented) The composition according to claim 57, wherein said agent is selected from the group consisting of agents that inhibit the expression of PRF1.

59. (Previously presented) The composition according to claim 57, wherein said agent is selected from the group consisting of small molecules that interact with PRF1, antibodies that specifically bind PRF1, polypeptides that bind to PRF1, and functional nucleic acids.

60. (Previously presented) The composition according to claim 59, wherein said functional nucleic acid is selected from the group consisting of an aptamer, an aptazyme, a ribozyme, a spiegelmer, an antisense oligonucleotide and an siRNA.